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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

- 1-9. (Cancelled)
- 10. (New) A method of evaluating a node of a communication network, comprising the steps of:

determining a capacity of the node based on a traffic model comprising at least one relationship between at least one application type and at least one rate of information being conveyed through the node; and

taking at least one preventive measure responsive to the determined capacity indicating a potential overload condition at the node.

11. (New) The method of claim 10, comprising

determining a plurality of relationships for a plurality of different application types at each of a plurality of different information rates; and

determining the traffic model from a combination of the determined relationships.

12. (New) The method of claim 10, comprising

determining the capacity of the node based upon a current processor occupancy of at least one processor at the node.

13. (New) The method of claim 10, comprising

determining the at least one relationship as a mathematical equation describing a relationship between processor occupancy of at least one processor at the node and the at least one application type at the at least rate of information.

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## 14. (New) The method of claim 10, comprising

determining a plurality of mathematical equations each describing a relationship between processor occupancy of at least one processor at the node and at least one application type at at least one information rate; and

determining the traffic model as a linear combination of the determined mathematical equations.

- 15. (New) The method of claim 10, wherein the communication network comprises a wireless communication network.
- 16. (New) The method of claim 15, comprising

determining a processor occupancy of at least one processor at the node from a traffic model comprising a linear combination of a plurality of mathematical equations, each describing a particular relationship between an information rate of a particular application type and a resulting processor occupancy.

- 17. (New) The method of claim 16, wherein the at least one processor processes subscriber information.
- 18. (New) The method of claim 15, comprising

determining the capacity of the node by determining a processor occupancy of a processor at the node for an uplink and a downlink of the processor.

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- 19. (New) A computer readable medium containing a plurality of computer executable instructions, comprising:
- a first set of instructions for determining at least one relationship between at least one application type and at least one rate of information conveyed through a communication network node;
- a second set of instructions for determining a traffic model based upon the at least one determined relationship; and
- a third set of instructions for determining a capacity of the node of the communication network based on the determined traffic model.
- 20. (New) The computer readable medium of claim 19, comprising
- a set of instructions for determining a plurality of relationships, each relationship corresponding to at least one application type and at least one information rate; and
- a set of instructions for combining the determined relationships to thereby determine the traffic model.
- 21. (New) The computer readable medium of claim 19, comprising
- a set of instructions for determining a processor occupancy of at least one processor at the node and using the determined processor occupancy for determining the capacity of the node.
- 22. (New) The computer readable medium of claim 19, comprising
- a set of instructions for determining at least one mathematical equation describing at least one relationship between a processor occupancy of at least one processor at the node and at least one application type at at least one information rate.
- 23. (New) The computer readable medium of claim 19, comprising:
- a set of instructions for determining the traffic model as a linear combination of a plurality of mathematical equations describing relationships between processor occupancy of at least one processor at the node and application types at selected information rates.

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24. (New) The computer readable medium of claim 19, comprising
a set of instructions for determining a processor occupancy for an uplink and a downlink
of at least one processor at the node.